NEW JERSEY DEPARTMENT OF TRANSPORTATION

CAMERA SURVEILLANCE SYSTEM DEVICE TESTING - LEVEL A B C

| | Project Name: | | | Test Date: | |
|---|--------------------------|-------------------------------|---------------------------------|---------------------------------------|-------------------------------|
| | | | | NB/SB/EB/WB/Median | |
| | Nearest Side St | reet Name: | | | |
| Township: | (| ounty: | Longitude: | Latitude: | |
| Level A: Perform the following fully operational. | tests at controller came | ra sites using vendor certifi | ed Software. Level A device tes | ting demonstrates that the individual | devices at each work site are |
| Γesting Software Name: _ | | | | | |
| Service Pole No.: | | Meter No | | | |
| Meter Cabinet Location: | | Longitude: | Latitude: | | |
| Camera Manufacturer: | | | | - | |
| Camera Model No.: | | _Camera Serial No.: | | - | |
| Structure Type: | | | | | |
| CSS Cabinet Serial No.: | css c | ontroller Firmware: | css (| Controller Firmware Revision: | |

NJDOT TEST 1 January 22, 2015

| Projec | t Name: | | Test Date: | |
|---|-------------------------------|-------------------------|--|-----------------------|
| Cam | era # Route: | MM | NB/SB/EB/WB/Median | |
| | rest Side Street Name: | | | |
| Township: | County: | Longitude: | Latitude: | |
| Level B: device testing demonstrates the software. After the Contractor's verificat | | | iter to the work site with the original equipme bservational and functional test period. | nt and manufacturer's |
| PRIOR TO LEVEL B TESTING, ENSURE THA | T NETWORK COMMUNICATIONS SYST | EM TESTING IS COMPLETE. | | |
| IS NETWORK COMMUNICATION SYSTEM | TESTING COMPLETE? | | | |
| YES N/A | | | | |
| IF YES, TEST DATE: TEST | RESULT: PASS FAIL FAIL |] | | |
| IF PASS, BEGIN LEVEL B TESTING | | | | |
| IF FAIL, REPEAT NETWORK COMMUN | IICATIONS TESTING AFTER TROUB | LESHOOTING | | |
| IF N/A, EXPLAIN | | | | |
| Traffic Operation Center: TOC | TOCS _ | | | |
| Communication Type: | | | Account # | |
| IP Address: | | | | |
| Subnet Mask: | Gateway: | | _ | |
| MAC Address: | | | | |
| Patch Panel #: | | | | |
| Cable Type/ Buffer Color/Fiber C | olor/ Fiber No.: | | | |

NJDOT TEST 2 January 22, 2015

| | Project Name: | Test Date: | | |
|-----------|---------------------|------------|------------|--------------------|
| | Camera # | Route: | MM | NB/SB/EB/WB/Median |
| | Nearest Side Street | Name: | | |
| Township: | Coun | ıty: | Longitude: | Latitude: |

Level C: Device testing demonstrates that all devices are fully operational from the designated control center using control center software management system. After the Contractor's verification test, the Department will conduct a 14 consecutive business day observational and functional test period. Perform following tests at designated control center using control center software management system (Genetec):

| Testing Software Name: |
|------------------------|
| |

1: VIDEO FEED

| | | | | Lev | el A | Lev | el B | Lev | el C | Comments |
|------|---|-------------------|-----------------|----------|-----------|---------|---------|------|------|----------|
| No. | Task | Required value | Actual Value | Pass | Fail | Pass | Fail | Pass | Fail | |
| 1A | | | Perfor | m follow | ing tests | at Remo | te Data | Port | _ | |
| I. | Display Video | N/A | N/A | | | | | | | |
| II. | Verify PTZ controls | N/A | N/A | | | | | | | |
| III. | Verify Alarm Operation of Data Port door | N/A | N/A | | | N/A | N/A | N/A | N/A | |
| IV. | Video Signal quality | 1 Vp-p | | | | N/A | N/A | N/A | N/A | |
| V. | Video signal to noise ratio | >50dB | | | | N/A | N/A | N/A | N/A | |

| | Project Name: | | | Test Date: |
|-----------|----------------------------|--------|------------|--------------------|
| | Camera # | Route: | MM | NB/SB/EB/WB/Median |
| | Nearest Side Street | Name: | | |
| Township: | Cour | nty: | Longitude: | Latitude: |

2: PAN, TILT & ZOOM FUNCTIONS

| | | | | Lev | el A | Lev | el B | Lev | el C | Comments |
|-----------|-------------------------------------|---|-----------------|------|-----------|----------|------|------|------|----------|
| No. | Task | Required Value | Actual Value | Pass | Fail | Pass | Fail | Pass | Fail | |
| 2A | | | | Con | firm Pan | Control | S | | | |
| I. | Continuous Pan Rotation | 360° | | | | | | | | |
| II. | Variable Pan Speed (per second) | N/A | N/A | N/A | N/A | | | | | |
| 2B | Confirm Tilt Controls | | | | | | | | | |
| I. | Variable Tilt Speed (per second) | N/A | N/A | N/A | N/A | | | | | |
| II. | Vertical Tilt Range Unobstructed | Dome: 0.2° to -92° Positional: +33° to -83° | | | | | | | | |
| <i>2C</i> | | | | Conj | firm Zooi | n Contro | ls | | | |
| I. | Zoom | Dome: 35X Optical 12X Digital Positional: 35X Optical 12X Digital | | | | | | | | |

NJDOT TEST 4 January 22, 2015

| | Project Name: | | | Test Date: |
|-----------|----------------------------|--------|------------|--------------------|
| | Camera # | Route: | MM | NB/SB/EB/WB/Median |
| | Nearest Side Street | Name: | | |
| Township: | Coun | ıty: | Longitude: | Latitude: |

3: CONTROLLER CAMERA CABINET

| | | | | Lev | el A | Leve | el B | Lev | el C | |
|-----------|---|---|-----------------|---------|---------|----------|-------|------|------|----------|
| No. | Task | Required Value | Actual Value | Pass | Fail | Pass | Fail | Pass | Fail | Comments |
| <i>3A</i> | | | | Cabinet | Environ | ment Cor | itrol | | | |
| I. | Confirm blower heater control with thermostat | In adjustable range of 40°F to 70°F | | | | N/A | N/A | N/A | N/A | |
| 3B | Ground Resistance | | | | | | | | | |
| I. | Verify Ground Resistance | $<$ 25 Ω | | | | N/A | N/A | N/A | N/A | |
| <i>3C</i> | AC Voltage | | | | | | | | | |
| l. | Verify AC Input Voltage | 120 Volts | | | | N/A | N/A | N/A | N/A | |
| II. | Verify Power supply Voltage | 24VAC | | | | N/A | N/A | N/A | N/A | |
| 3D | | | | | Alarr | ns | | | | |
| l. | Verify Low Temperature Alarm | Below 41° F | | | | N/A | N/A | N/A | N/A | |
| II. | Verify Ventilation Failure Alarm | At temperature > 120° F | | | | N/A | N/A | N/A | N/A | |
| 3E | | | | | Cabinet | Light | | | | |
| I. | Operate Cabinet Switch to Disable the Lamps | | | | | N/A | N/A | N/A | N/A | |

NJDOT TEST 5 January 22, 2015

| | Project Name: | | | Test Date: |
|-----------|-----------------------|--------|------------|--------------------|
| | Camera # | Route: | MM | NB/SB/EB/WB/Median |
| | Nearest Side Street N | Name: | | |
| Township: | Count | zy: | Longitude: | Latitude: |

4: CAMERA DATABASE

| | | Lev | Level A | | Level B | | el C | | | |
|------|---|-------------------|-----------------|------|---------|------|------|------|------|----------|
| No. | Task | Required Value | Actual Value | Pass | Fail | Pass | Fail | Pass | Fail | Comments |
| 4 | | | | | | | | | | |
| I. | Verify IP address with IT group. | | | N/A | N/A | N/A | N/A | | | |
| II. | Add cameras to the Control Center | | | N/A | N/A | N/A | N/A | | | |
| III. | Verify camera name is as per Traffic Operations guidelines. | | | N/A | N/A | N/A | N/A | | | |
| IV. | Add camera to camera tour as per Traffic Operations guidelines | | | N/A | N/A | N/A | N/A | | | |
| V. | Display video from camera tour. | | | N/A | N/A | N/A | N/A | | | |

5: ON SCREEN DISPLAY

| | | | | Lev | el A | Leve | el B | Lev | vel C | |
|-----|--|-------------------|-----------------|------|------|------|------|------|-------|----------|
| No. | Task | Required Value | Actual Value | Pass | Fail | Pass | Fail | Pass | Fail | Comments |
| 1. | Verify set up of on screen display of four quadrants on the top left | 4 Quadrants | | N/A | N/A | N/A | N/A | | | |

NJDOT TEST 6 January 22, 2015

| | Project Name: | | Test Date: | | | | | |
|-----------|---------------------|--------|------------|--------------------|--|--|--|--|
| | Camera # | Route: | MM | NB/SB/EB/WB/Median | | | | |
| | Nearest Side Street | Name: | | | | | | |
| Township: | Coun | ty: | Longitude: | Latitude: | | | | |

6: PRESETS

| | | | | Level A | | Level B | | Level C | | |
|-----|--|-------------------|-----------------|---------|------|---------|------|---------|------|----------|
| No. | Task | Required Value | Actual Value | Pass | Fail | Pass | Fail | Pass | Fail | Comments |
| I. | Verify set up of presets 1 thru 4 with pan and tilt settings and ensure each zone is labeled as specified by the department. | 4 Presets | | N/A | N/A | N/A | N/A | | | |

7: OTHER REQUIREMENTS

| | | | | Lev | el A | Lev | vel B | Lev | zel C | |
|-----|---|------------|-----------------|---------|-----------|--------|-------|------|-------|----------|
| No. | Task | Start Date | End Date | Pass | Fail | Pass | Fail | Pass | Fail | Comments |
| 7 | | | | 0perati | ional Req | uireme | ent | | | |
| I. | Operate and Monitor Camera operations for 7 consecutive business days. | | | N/A | N/A | | | N/A | N/A | |
| II. | Operate and Monitor Camera Operations for 14 consecutive business days. | | | N/A | N/A | N/A | N/A | | | |

NJDOT TEST 7 January 22, 2015

NEW JERSEY DEPARTMENT OF TRANSPORTATION

CAMERA SURVEILLANCE SYSTEM DEVICE TESTING - LEVEL A B C

| Project Name: | | Test Date: |
|---|----------------------|---|
| Camera # Ro | ute: MM | NB/SB/EB/WB/Median |
| | | |
| Fownship: | County: Latitude: | Longitude: |
| | | |
| LEVEL A TEST RESULT | S: | |
| | | |
| PASS | | FAIL |
| Correction Work Items: | | |
| 1 | | |
| 2 | | |
| | | |
| | | |
| | | |
| 5 | | |
| | | |
| | | |
| | | s been performed and that the information |
| bove accurately represent the re | esults of the test. | |
| ontractor Name: | | |
| ontractor Representative Nam ignature and Date: | e: | |
| | | |
| ignature and Date: | | |
| | | |
| Corrected Work Items: | ITS Inspe | ector Signatures & Date |
| · | | |
| · | | |
| · | | |
| | | |

NJDOT TEST 8 January 22, 2015

NEW JERSEY DEPARTMENT OF TRANSPORTATION

CAMERA SURVEILLANCE SYSTEM DEVICE TESTING - LEVEL A B C

| | | Test Date: |
|--|---|--------------------|
| Camera # | Route: MM | NB/SB/EB/WB/Median |
| | | |
| ownship: | County: Latitude: | Longitude: |
| | <u></u> | |
| LEVEL B TEST RES Start Date End Date PASS Correction Work Ite 1 2 3 | SULTS: | FAIL |
| ove accurately represent to | he results of the test. Name: | |
| | | |
| nature and Date: S Inspector Name: | | |
| gnature and Date: S Inspector Name: gnature and Date: obility Management Nort | | |
| gnature and Date: S Inspector Name: gnature and Date: obility Management North gnature and Date: | h/South Representative Name::_ | |
| gnature and Date: S Inspector Name: gnature and Date: obility Management North gnature and Date: | h/South Representative Name:: _ S: ITS Ins | |
| gnature and Date: S Inspector Name: gnature and Date: bbility Management North gnature and Date: brrected Work Item | h/South Representative Name:: _ s: ITS Ins | |

NJDOT TEST 9 January 22, 2015

| Project Name: | | | Test Date: |
|---|-----------|----------------------|-----------------------------------|
| Camera # | Route: | MM | _ NB/SB/EB/WB/Median |
| Nearest Side Street N | lame: | | |
| Township: | | | Longitude: |
| | Latitude: | | |
| | | | |
| LEVEL C TEST F Start Date End Date | | | |
| PASS [| | FAII | |
| Correction Work | Items: | | |
| 1 | | | |
| 2 | | | |
| 3. | | | |
| | | | |
| 4 | | | |
| | | | |
| We agree that Level C testing above accurately represents | | ce System has been p | erformed and that the information |
| Contractor Name: | | | |
| Contractor Representative l | Name: | | |
| Signature and Date: | | | |
| ITS Inspector Name: Signature and Date: | | | |
| Mobility Management North | | | |
| Resident Engineer Name: Signature and Date: | | | |
| | | | |
| Corrected Work Item | s: | ITS Inspe | ector Signatures & Date |
| 1 | | | |
| 2 3 | | | |
| 4 | | | |